

Job Descriptions Information Technology

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Business Intelligence Developer

The Business Intelligence Developer (BID) is experienced in developing Business Intelligence Applications. This role requires the ability to work with commercial off-the-shelf (COTS) and custom tools designed to analyze business data that could include financial, operational, or other metrics reporting. This technology typically provides historical, current, and predictive views of operations. The Business Intelligence Developer will work with online analytical processes, business performance management, benchmarking, or predictive analytics applications. The Business Intelligence Developer's responsibility within the various stages of the development/implementation cycle can include requirements gathering, analysis, design, construction, testing, deployment, tool administration and configuration, and end-user training.

BID1

Years of Relevant Experience	2 to 4 years
Preferred Education	4 year college degree
Role Description	<ul style="list-style-type: none"> • Experience in at least four areas of the software development lifecycle. • Create systems for operational and analytical reporting. • Develop applications using data modeling, data quality, ETL, and RDBMS tools. • Work with data warehouses, data marts, legacy systems, and other data sources. • Create metadata for business intelligence applications. • Experience with architecture that allows users to retrieve data from multiple source types (mainframes, client/server, Windows, web based, etc.), including multiple server platforms, and access vast data sources.

BID2

Years of Relevant Experience	4 to 7 Years
Preferred Education	4 year college degree
Role Description	<p>All roles specified in BID1 plus the following:</p> <ul style="list-style-type: none"> • Experience in most areas of the software development lifecycle. • Perform database design and data modeling. • Experience managing resources for maintaining the data dictionary and meta-data for business intelligence applications.

BID3

Years of Relevant Experience	7 plus years
Preferred Education	4 year college degree
Role Description	All roles specified in BID2 plus the following: <ul style="list-style-type: none">• Experience in all areas of the software development lifecycle.• Mentor and supervise other Business Intelligence developers.• Experience configuring RDBMS databases and servers supporting large volumes of data for business intelligence applications.

Data Center Specialist

The Data Center Specialist (DCS) is responsible for the monitoring and control of electronic computer equipment including peripheral devices and the management, enhancement, transformation and manipulation of a variety of print streams from various systems, products, and platforms. The Data Center Specialist may enter commands at computer terminals, set controls on computers and peripheral devices, monitor computer operations, and respond to system error messages.

DCS1

Years of Relevant Experience	1 to 4 years
Preferred Education	Associates Degree or equivalent technical study
Role Description	<ul style="list-style-type: none">• Serves as a technician for computer operations and production control performing technical duties in the computer room.• Enters commands, using terminal or controls on a computer or peripheral device, to integrate and operate equipment.• Determines accuracy and acceptability of input.• Analyzes priorities and schedules, executes, prints, and distributes jobs.• Monitors the system for equipment failure or errors in performance; Troubleshoots and resolves problems.• Performs duties related to Operations' peripheral devices.• Reviews, analyzes, and corrects job control language.• Documents job start and end times, all job failures and problems that occur during the shift. Reports all problems to shift supervisor.

	<ul style="list-style-type: none"> • Uses software provided to produce reports.
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DCS2

Years of Relevant Experience	4 to 7 years
Preferred Education	Associates Degree or equivalent technical study
Role Description	<p>All roles specified in DCS1 plus the following</p> <ul style="list-style-type: none"> • Serves as a working supervisor for a shift of computer operations personnel. • Oversees the operation of computer hardware systems, including coordinating and scheduling the use of computer terminals and networks to ensure efficient use. • Responsible for the running of the computer room. • Assigns work. • Plans and coordinates operations throughput with agency users.

Data Mart Developer

The Data Mart Developer (DMD) must have Data Mart and Data Warehouse experience and be familiar with data modeling, configuration, and performance tuning. The Data Mart Developer will have a wide range of knowledge creating and architecting complex data warehouses and normalization/denormalization of various complex databases. The Data Mart Developer need not work with a specific RDBMS, as sometimes the diversity of systems adds value.

DMD1

Years of Relevant Experience	1 to 3 years
Preferred Education	4 year college degree
Role Description	<ul style="list-style-type: none"> • Perform data normalization. • Focus on production data marts and maintenance of existing marts/warehouses.

	<ul style="list-style-type: none"> • Tune and monitor data marts and transitioning data marts from development to production. • Recover from production data mart emergencies.
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DMD2

Years of Relevant Experience	3 to 5 years
Preferred Education	4 year college degree
Role Description	<p>All roles specified in DMD1 plus the following:</p> <ul style="list-style-type: none"> • Experience with dimensional data modeling of star schemas using modeling tools. • Develop ETL processes using enterprise ETL platforms. • Develop Business Intelligence reporting tools. • Design and implement logical schemas, key constraints, triggers, and indexing strategies.

DMD3

Years of Relevant Experience	5 plus years
Preferred Education	4 year college degree
Role Description	<p>All roles specified in DMD2 plus the following:</p> <ul style="list-style-type: none"> • Demonstrate excellent analytical, oral, and written communications skills. • Oversee the design and implementation of logical schemas, key constraints, triggers, and indexing strategies. • Participate in end user interviews, requirements analysis, and star schema design for proofs of concept using various development strategies for building data marts in an enterprise data warehouse environment. • Mentor and supervise Data Mart and Data Warehouse developers.

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Data Modeling Consultant

The Data Modeling Consultant (DMC) has extensive data modeling and analysis experience, including metadata program management, data quality analysis, and logical and physical data modeling. The Data Modeling Consultant is also well-versed in conceptual/logical modeling. The Data Modeling Consultant has the ability to use graphical modeling tools and can mentor and supervise data modelers and analysts.

DMC1

Years of Relevant Experience	1 to 4 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<ul style="list-style-type: none"> • Perform business analysis, data modeling, logical and physical database design, data acquisition analysis and design, and data access analysis and design. • Create pure logical data and business models of business subject areas using data modeling. • Participate in the design and development of large database applications. • Understanding of relational and dimensional data modeling techniques including data normalization/de-normalization, entity-relationship modeling, and star schema design. • Demonstrate excellent analytical, oral, and written communications skills, including the ability to clearly communicate complex technical concepts in non-technical English. • Experience with relational database technologies. • Develop data dictionaries, metadata, and data model documentation. • Use and administer data model repositories and their associated dictionaries.

DMC2

Years of Relevant Experience	5 to 7 years
Preferred Education	4 year college degree or equivalent technical study

Role Description	<p>All roles specified in DMC1 plus the following:</p> <ul style="list-style-type: none"> • Create physical data models for large/complex systems from a logical business model, as well as a physical data model. • Create logical and physical data models through reverse-engineering of large/complex source systems using data modeling tools. • Extensive hands-on experience with relational and dimensional data modeling techniques including data normalization/de-normalization, entity-relationship modeling, and star schema design. • Coordinate and interface with business analysts and technologists. • Evaluate existing data models, both logical and physical, for accuracy and flexibility. • Prepare, evaluate, and integrate existing models with enterprise models.
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DMC3

Years of Relevant Experience	7 plus years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in DMC2 plus the following:</p> <ul style="list-style-type: none"> • Identify inter- or intra-database relationship conflicts that occur at the schema level or those that are semantical (i.e., synonyms and homonyms). • Resolve mission-critical databases' schema, entities, attributes, or instance relationship conflicts. • Mentor and supervise data modelers and analysts.

Database Administrator

The Database Administrator (DBA) is responsible for data analysis and database management. Database Administrators typically are involved in maintenance, enhancement, designing of data dictionaries, physical and logical database models, and performance tuning. Database Administrators have a range of skills and knowledge of the utilities and production tools used for data storage management to support the Application Team.

DBA1

Years of Relevant Experience	2 to 3 years
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Preferred Education	4 year college degree or equivalent technical study
Role Description	<ul style="list-style-type: none"> • Skilled data dictionary analysis and design and data model analysis design. • Maintains central data repository. • Experience and knowledge in supporting application system development life cycle. • Responsible for data dictionary backup and recovery. • Responsible for definition of standards of data dictionaries. • May program dictionary analysis and maintenance software. • Perform performance tuning. • Monitor database performance and space requirements. • Schedule and monitor end of day data warehousing jobs. • Assist in coordinating software releases. • Communicate accurate and useful status updates. • Manage and report time spent on all work activities. • Follow quality standards. • Ability to work in a team environment. • Complete assigned tasks. • Strong communication skills; both written and spoken.

DBA2

Years of Relevant Experience	3 to 5 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in DBA1 plus the following:</p> <ul style="list-style-type: none"> • Business systems analysis and design experience. • Logical data modeling techniques. • Production environment Tools/Utilities. • Knowledgeable in data analysis and database management techniques. • Execution of all responsibilities with little direct supervision of Team Lead. • Administration and scripting experience in relative platform. • Supervise performance tuning. • Author shell scripts to perform back up, restore, and monitoring tasks. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner. • Identify and track issues, risks and action items.

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DBA3

Years of Relevant Experience	5 plus years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in DBA2 plus the following:</p> <ul style="list-style-type: none"> • Highly skilled at database design, installations, conversions. • Responsible for database backup and recovery procedures, access security and database integrity, physical data storage design and data storage management. • Participates in Database Management System selection and maintains database performance. • Expertise in specific Database Management Systems. • Knowledge of various Database Management System products. • Provide status of work to Project Team Lead. • Engage in ongoing process improvement.

Extract, Transform, and Load (ETL) Programmer

The Extract, Transform, and Load (ETL) Programmer has worked in areas of data mart/data warehouse design and has extensive knowledge of an Extraction, Transformation, and Loading toolset or toolsets. The ETL Programmer has worked on some or all of the following steps: Cycle Initiation, Building of reference data, Extraction, Validation, Transformation, Staging, Auditing, Publishing to target tables, Archiving, and Cleaning. Systems may involve parallel processing or traditional ETL.

ETL1

Years of Relevant Experience	1 to 3 years
Preferred Education	4 year college degree
Role Description	<ul style="list-style-type: none"> • Participate in writing custom ETL statements or using commercial ETL tools to prepare database for implementation. • Use SQL programming tools. • Developing and creating source system mapping.

	<ul style="list-style-type: none"> • Verify program logic by preparing test data and conducting ETL unit tests.
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ETL2

Years of Relevant Experience	3 to 5 years
Preferred Education	4 year college degree
Role Description	<p>All roles specified in ETL1 plus the following:</p> <ul style="list-style-type: none"> • Develop data warehouses, data marts, and/or operational data store applications, including large-scale data volumes, focusing on ETL development. • Analyze database design, including schemas, database structures, data definitions and data models. • Develop data models, entity-relationship diagrams, data dictionaries, referential integrity, and normalization evaluation in programs to maintain the database integrity, retrieve and manipulate data. • Develop enterprise-wide multi-dimensional data warehouses using relational databases.

ETL3

Years of Relevant Experience	5 plus years
Preferred Education	4 year college degree
Role Description	<p>All roles specified in ETL2 plus the following:</p> <ul style="list-style-type: none"> • Create data models, schemas, structure, and data definitions. • Extensive enterprise wide implementation of complex BI tools and ETL tools. • Conduct ETL and data model testing. • Mentor and supervise ETL programmers. • May have worked on Parallel processing implementations.

Help Desk Support

Support in-house help desk teams by providing the skills listed below.

HDS1

Years of Relevant Experience	1 to 3 years field experience
Preferred Education	2 year associates degree or equivalent technical study
Role Description	<ul style="list-style-type: none"> • Provide service and preventive maintenance activities on element exchange/baseline products (products with element exchange service and traditional maintenance philosophies; i.e., terminals, printers, personal computers, etc.). • Basic knowledge of electrical/mechanical principles and basic electronics. • Read and comprehend technical service manuals and publications. • Knowledge of basic mathematics to read and understand various gauges, meters, and measurement devices. • Able to diagnose and repair products by replacing worn or broken parts, and making technical adjustments. • Makes appropriate use of reference publications and diagnostic aids in resolving technical problems. • Take active role in suggesting peripheral equipment. • Detect and correct equipment errors. • Prioritize and schedule own workload. • Assist in coordination of changes, upgrades and new products, ensuring systems will operate correctly in current and future environment. • Provide accurate and complete answers to general use and administrative environment questions in a timely manner. • Implement shared software, such as operating systems, configuration management tools, application and development tools, testing tools, compilers, and code editors. • Communicate accurate and useful status updates. • Manage and report time spent on all work activities. • Follow quality standards. • Ability to work in a team environment. • Complete assigned tasks. • Strong communication skills; both written and spoken.

HDS2

Years of Relevant Experience	3 or more years field experience
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Preferred Education	2 year college degree or equivalent technical study
Role Description	<p>All roles specified in HDS1 plus the following:</p> <ul style="list-style-type: none"> • Thorough knowledge of electrical/mechanical principles and basic electronics. • Knowledge of system relationships and telecommunications. • Application of technical skill to a variety of equipment types. • Diagnoses and repairs industry systems products. • Perform routine service and repairs on industry system products without assistance. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner. • Identify and track issues, risks and action items.

Information Security Specialist

The Information Security Specialist (ISS) is responsible for developing and documenting information security policies and standards, in addition to planning, coordinating, and implementing security measures for information systems. The Information Security Specialist will use software, hardware, and procedures to minimize the likelihood that data could be maliciously accessed, stolen, modified, or deleted, and to regulate access to computer data files to prevent unauthorized usage or disclosure of information.

ISS1

Years of Relevant Experience	2 to 5 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<ul style="list-style-type: none"> • Define best practice approaches to develop, implement and maintain an information security program. • Coordinate implementation of information security best practices, hardware, and software, including, but not limited to, network devices, servers, data classification, system management, databases, portal and desktop securities, and ancillary information security appliances such as intrusion detection, prevention, and response. • Develop plans to safeguard computer files against accidental or unauthorized modification, destruction, or disclosure and to meet emergency data processing needs. Monitor use of data files and regulate access to safeguard information in computer files. • Modify computer security files to incorporate new software, correct errors, or change individual access status.

	<ul style="list-style-type: none"> • Perform risk assessments and execute tests of data processing system to ensure functioning of data processing activities and security measures. • Encrypt data transmissions and erect firewalls to conceal confidential information as it is being transmitted and to keep out tainted digital transfers.
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ISS2

Years of Relevant Experience	5 plus years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in ISS1 plus the following:</p> <ul style="list-style-type: none"> • Identify and track issues, risks and action items. • Document information security policies, standards, and procedures spanning and encompassing the range of topics such as organization security, asset ID and classification, personal security, communications and operations management, access control, system development and maintenance, business continuity management, and compliance. • Document computer security and emergency measures policies, procedures, and tests. • Confer with users to discuss issues such as computer data access needs, security violations, and programming changes. • Train users and promote security awareness to ensure system security and to improve server and network efficiency.

Integration Engineer

The Integration Engineer is the key resource on a team of hardware, network and wiring technicians and is responsible for analyzing, planning, installing, and implementing network, systems/server, and/or voice/data telecommunications. The Integration Engineer also serves as a systems expert in implementing complex or proprietary systems that involve telephony or data communications.

IE1

Years of Relevant Experience	0 to 2 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<ul style="list-style-type: none"> • Conduct analysis of blueprints or initial scoping design.

	<ul style="list-style-type: none"> • Meet with architects and other engineers to ensure the hardware and associated systems are implemented according to the proper standards. • Review integration plans for accuracy and consistency. • Share integration plan with the other on-site teams. • Communicate with client on approvals for network/systems integration plans. • Consult with IT managers to ensure products/servers/hardware/telephony are being implemented and installed according to plan. • Receive and review quotes for vendor equipment. • Coordinate delivery of equipment and ensure proper installation of equipment.
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IE2

Years of Relevant Experience	2 to 5 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in IE1 plus the following:</p> <ul style="list-style-type: none"> • Conduct drawing review. • Create the integration plan, including network documentation. • Create back-up delivery plans. • Manage tasks of team to ensure adaptation to schedules. • Communicate blueprint and schedule modifications to architects impacted by change. • Conduct actual integration installation for proprietary hardware/servers/technology. • Integrate specialized technology. • Oversee integration of facilities that are less than 30,000 square feet.

IE3

Years of Relevant Experience	5 plus years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in IE2 plus the following:</p> <ul style="list-style-type: none"> • Manage product and system integration in concert with architects and construction managers.

	<ul style="list-style-type: none"> Oversee integration of facilities that exceed 30,000 square feet.
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Network Systems Administrator

The Network Systems Administrator (NSA) installs, configures, and supports an organization's local area network (LAN), wide area network (WAN), and Internet system or a segment of a network system. The NSA Maintains network hardware and software, monitors the network to ensure network availability to all system users, and performs necessary maintenance to support network availability. The NSA may supervise other network support and client server specialists and plan, coordinate, and implement network security measures.

NSA1

Years of Relevant Experience	2 to 5 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<ul style="list-style-type: none"> Monitor, diagnose and troubleshoot network (LAN/WAN) performance, hardware and software platforms, resolve server connectivity issues in a multi-tiered and secure networking environment, and replace defective components. Install, configure, manage and maintain server hosted network attached storage (NAS) and storage area network (SAN) disk storage technologies. Perform server backups, restorations, fail-over recovery, and disaster recovery operations. Maintain and administer computer networks and related computing environments including computer hardware, systems software, applications software, and all configurations. Plan, coordinate, and implement network security measures to protect data, software, and hardware. Perform routine server operating system and application software maintenance with patches and updates. Test computer hardware, networking software and operating system software. Confer with network users about how to solve existing system problems. Coordinating with vendor for problem resolution. Experience in network cabling systems and fiber optic cabling.

NSA2

Years of Relevant Experience	5 plus years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in NSA1 plus the following:</p> <ul style="list-style-type: none"> • Design, install, configure, monitor and troubleshoot network equipment such as, but not limited to, Hubs, Network Interface Cards (NIC), Local Area Network (LAN) cards, hard drives, Ethernet switches, routers, wireless bridges, monitoring devices, access points, firewalls, intrusion detection systems, and content devices. • Recommend changes to improve systems and network configurations, and determine hardware or software requirements related to such changes. • Supervise other NSA's and train them in advanced skills related to networks. • Technical writing and documentation.

Network Systems Analyst

The Network Systems Analyst (SAN) works with technical architects and client users to obtain current systems requirements, technical specifications, and bandwidth needs (i.e. number of users, operational procedures, systems size and configuration, etc). The Network Systems Analyst writes detailed descriptions of user needs; programs functions and steps required to add, modify, enhance or change network, hardware, and systems software attributes or configurations. In addition, the SAN may review computer system capabilities, workflows, and scheduling limitations to determine if a program request or program change is possible within the existing system.

SAN1

Years of Relevant Experience	0 to 2 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<ul style="list-style-type: none"> • Research, test, evaluate, and recommend telecommunications and data network systems. • Analyze workload, including traffic and utilization trends. • Interface with users, consultants, technical teams, and vendors to determine the most appropriate type of hardware/network/systems installation. • Support complex PCs and LAN/WAN networks throughout the organization. • Knowledge and experience with local and wide area networking, communications, and related hardware and software.

	<ul style="list-style-type: none"> • Monitor performance of system/network/program performance after implementation and installation.
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SAN2

Years of Relevant Experience	2 to 5 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in SAN1 plus the following:</p> <ul style="list-style-type: none"> • Identify areas that need upgraded equipment, such as modems, fiber optic cables, and telephone wires. • Analyze user requirements, procedures, and problems to automate processing or to improve existing computer system. • Study existing information processing systems to evaluate effectiveness. • Devise ways to apply existing systems resources to additional operations. • Plan, design, and develop new computer systems to improve production or workflow, as required. • Prepare workflow charts and diagrams that detail the operations to be performed by equipment and computer programs and operations, as well as personnel.

SAN3

Years of Relevant Experience	5 years plus
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in SAN2 plus the following:</p> <ul style="list-style-type: none"> • Possess advanced knowledge and experience in the area of local and wide area networking, communications, and related hardware and software. • Conduct system studies that will help the organization realize maximum benefit from investing in equipment, personnel, and business processes. • Plan and prepare technical reports, memoranda, and instructional manuals to document program development. • Perform system upgrades and correct errors to maintain system after implementation.

Product Specialist

The Product Specialist (PS) is the expert for a technical development or execution environment product or set of products. The primary responsibility of a Product Specialist is to ensure the availability and facilitate the productive use of a product for Application Teams or end users. The Product Specialist may own part of a product, all of one product, or several products depending on the nature of the product(s) and their use. The Product Specialist requires significant to expert experience and skills in the product supported. The Product Specialist will usually also have significant experience in the operating environment(s) (e.g., HP/UX, NT, MVS, etc.) on which the product is implemented. If the product is one that was internally developed, the supporting PS should also have most of the skills of a Programmer. The Product Specialist is responsible for collaborating with Technical Architecture Specialist, System Specialists, Programmers and vendors to ensure and enhance the use of the product and effect migration to new versions of a product.

PS1

Years of Relevant Experience	1 to 2 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<ul style="list-style-type: none"> • Make sound recommendations on functional and technical improvements to the product. • Analyze the functional and technical impact of product planning decisions. • Develop appropriate functional and usability standards for products. • Track and document expected volume and type of use of the product. • Participate in product design reviews to verify that design meets quality standards and functional/technical requirements. • Perform impact analyses on production fixes and enhancements to establish priorities. • Provide basic product support and provide accurate and complete answers to detailed product questions in a timely manner. • Provide effective on-site product support as needed. • Accurately sets severity of identified defects. • Provide input to training and / or documentation materials regarding latest technical and functional design changes. • Document all work for future reference. • Review the system test approach and conditions used as the basis for detailed test scenarios. • Follow quality standards. • Analytical and customer service skills. • Communicate accurate and useful status updates. • Ability to work in a team environment. • Complete assigned tasks. • Strong communication skills; both written and spoken.

PS2

Years of Relevant Experience	2 to 5 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in PS1 plus the following:</p> <ul style="list-style-type: none"> • Actively contribute as an expert or actual designer. • Coordinate product design reviews to verify that design meets quality standards and functional/technical requirements. • Provide accurate estimates for design and programming efforts for system changes and enhancements. • Coordinate enhancements to business and logical data models with data base administration to make the appropriate changes to the physical data model. • Confirm that technical architecture will support all changes required by product enhancements. • Effectively lead product tests and trials. • Identify appropriate business examples to illustrate key concepts / features. • Anticipate, identify, track and resolve issues and risks affecting own work and work of the Application Team. Develop contingency plans as necessary. • Apply specific expertise to ensure that products meet defined customer objectives. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner. • Identify and track issues, risks and action items.

PS3

Years of Relevant Experience	5 years plus
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in PS2 plus the following:</p> <ul style="list-style-type: none"> • Demonstrate expertise in teaching / conveying technical and / or functional courses / concepts. • Develop appropriate work programs / budgets and use to effectively schedule tasks/assignments. • Identify improvements to project standards to achieve high quality services / products.

Programmer

The Programmer (PR) is responsible for analysis, design, coding, component and assembly testing of all application code owned by the Application Team. Programmers typically are involved in maintenance (including production support), enhancement, and development work. Programmers have a range of skills and knowledge of the technologies used and applications supported by the Application Team. The Programmer works with the Functional Architect and Technical Architecture Specialist on an as needed basis to ensure that design and code meets customer requirements.

PR1

Years of Relevant Experience	Less than 2 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<ul style="list-style-type: none">• Code enhancement and development programs and/or required fixes to production problems using the functional and technical programming standards.• Test enhancement and development programs.• Participate in structured code reviews / walkthroughs.• Execute all required process steps.• Create and provide content for operational documentation to Technical Writers.• Utilize configuration management tools, design tools, debugging tools, and any other environment specific tools necessary to create, test, and implement an application.• Research problems before approaching the Team Lead or Functional Architect for assistance.• Limited functional knowledge.• Follow quality standards.• Support installation of application releases into production as directed.• Communicate accurate and useful status updates.• Ability to work in a team environment.• Complete assigned tasks.• Strong communication skills; both written and spoken.

PR2

Years of Relevant Experience	2 to 5 years
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Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in PR1 plus the following:</p> <ul style="list-style-type: none"> • Analyze and design enhancements, development programs, and/or required fixes to production problems. • Design applications to functional and technical programming standards. • Work with Functional Architects to gather and interpret user requirements into design specifications. • Develop system specifications and interfaces. • Determine time estimates and schedule for work. • Possess moderate functional and process knowledge. • Assist in managing and directing Application Team processes. • Coordinate work with other software developers on Application Teams. • Assist Team Lead or Test Team Lead in monitoring estimated-time-to-complete (ETC) and actuals for assigned tasks. • Develop application designs in support of the systems specifications and interfaces, perhaps in conjunction with application or technical architects. • Operating System expertise sufficient to perform performance and tuning diagnostics. • Work with users to ensure that solutions meet business requirements. • Execution of all responsibilities with little direct supervision of Team Lead. • Generally aware of new developments in industry and process and has ability to apply them to work as appropriate. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner. • Identify and track issues, risks, and action items.

PR3

Years of Relevant Experience	5 to 8 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in PR2 plus the following:</p> <ul style="list-style-type: none"> • Plan all required process steps. • Review and understand the Application Team’s work plan. • Provide status of work to Team Lead.

	<ul style="list-style-type: none"> • Anticipate, identify, track and resolve issues and risks affecting own work and work of the Application Team. Develop contingency plans as necessary. • Engage in ongoing process improvement. • Possess detailed functional and process knowledge. • Utilize deep modeling, design, and coding skills. • Provide expertise in one or more database environments.
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Project Manager

The Project Manager (PM) directs, administers, and regulates an enhancement or development program. The Project Manager is the individual ultimately responsible to the agency. The Project Manager's primary responsibility is to drive the entire effort from start to finish. The Project Manager must ensure that the program is completed on schedule and that the final product meets the business, technical, and established quality requirements. The difference between a PM1, PM2, and PM3 will depend on the size of the project, and the breadth and scope of the project.

PM1

Years of Relevant Experience	2 to 5 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<ul style="list-style-type: none"> • Responsible for the development of estimates for the enhancement or development effort in planning, analysis, design, construction, testing, and implementation. • Accountable for delivery of all work tasks identified in the program plan. • Responsible for the capture and reporting of required program management metrics. • Adjust and revise estimates when necessary. • Ensure all changes to scope follow change processes and are documented. • Ensure new estimates are approved by the client and agreed upon. • Adjust and revise estimates when necessary. • Manage, and track the program progress against the program plan. • Monitor project milestones and phases to ensure the project is on schedule. Take corrective actions if a project begins to slip its schedule. • Prepares status reports on a periodic basis for program team, team leads, group leads, and program manager and appropriate stakeholders. • Plan, organize, prioritize, and manage multiple work efforts across application teams. • Develop the detailed program plan for the enhancement or development effort.

	<ul style="list-style-type: none"> • Accountable for the final program management evaluation review with stakeholders for approval upon program completion. • Responsible to tailor and baseline all program templates. • Accountable to schedule or monitor status reviews, peer reviews, program management inspections, and software quality assurance work product and process reviews with the appropriate designated resources. • Notify team leads of project timelines, milestones, phases, work requests target dates, and approved executable work package. • Communicate and work with users and client as necessary. • Coordinate and present proposals to agencies as necessary. • Analyze and distribute reports on program metrics associated with work items related to improvement measures. • Ensure processes and activities are followed.
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PM2

Years of Relevant Experience	5 to 7 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in PM1 plus the following:</p> <ul style="list-style-type: none"> • Accountable for the approval and sign-off of the program plan with customer representatives, such as portfolio managers, and all affected program stakeholders. • Accountable for management of scope for the program and gaining agreement and approval of scope changes with customer representatives and affected stakeholders. • Build and maintain relationships with key stakeholders and customer representatives. • Direct work planning and scheduling design work. • Manage and track the program progress against the program plan. • Serve as the primary point of contact for all program-related issues and resolution of issues. • Coordinate and present proposals to agencies as necessary. • Identify and manage program risks and develop risk mitigation strategies; track to closure. • Ensure team leads adjust and revise estimates when necessary. • Anticipate issues and proactively address them. Resolve conflicts with sensitivity and tact. • Coordinate the establishment of program standards and program specific procedures with team leads. • Responsible for project compliance with standards and procedures.

	<ul style="list-style-type: none"> • Responsible for the capture and reporting of required program management metrics. • Responsible to tailor and baseline all program templates. • Develop and facilitate achievement of program service commitments and performance metrics. • Ensure that tasks provide value and support the strategic direction of the program and meet service commitments; conduct reviews with agencies. • Accountable for the final program management evaluation review with stakeholders for approval upon program completion. • Communicate effectively with customers and software / hardware suppliers supporting the State as appropriate. • Identify and track issues. • Balance workload with program members' capacity. • Communicate to team members how their work assignments relate to and help achieve program objectives. • Plan program specific training and orientation needs.
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PM3

Years of Relevant Experience	7 plus years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in PM2 plus the following:</p> <ul style="list-style-type: none"> • Accountable for activities with delivery cycles in excess of 8 to 12 months.

System Administrator

The System Administrator (SA) is responsible for server back up and security, along with performance tuning and capacity planning. System Administrators should possess an understanding of both network and distributed computing concepts. This is accomplished by working with the Systems Management Team Lead to understand the scope of services to be provided and assessing the impact they will have on the technical infrastructure.

SA1

Years of Relevant Experience	Less than 2 years
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Preferred Education	4 year college degree or equivalent technical study
Role Description	<ul style="list-style-type: none"> • Familiarity with most basic system administrator tools and process; for example, can boot/shutdown a machine, add and remove user accounts, use back up programs, and maintain system database files. • Maintain the project servers. • Maintain the file and print capacity. • Ensures that backups are performed as appropriate. • Act as a front-line interface to users. • Accepts trouble reports and dispatch them to appropriate system administrators. • Ability to write scripts in a particular administrative language. • Programming experience with any applicable language. • Communicate accurate and useful status updates. • Manage and report time spent on all work activities. • Follow quality standards. • Ability to work in a team environment. • Complete assigned tasks. • Strong communication skills; both written and spoken.

SA2

Years of Relevant Experience	2 to 4 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in SA1 plus the following</p> <ul style="list-style-type: none"> • Responsible for operating and other system software. • Responsible for upgrading the operating and system software and keeping patches current. • Familiarity with fundamental networking/distributed computing environment concepts. • Ability to do minimal debugging and modification of programs. • Execute the disaster recovery/back up procedures and archiving procedures. • Manage security for servers. • Responsible for performance tuning, capacity planning, database administration, and fault management. • Provide tier two support of the technical infrastructure. • Coordinating efforts with vendors if tier three support is required. • Responsible for ensuring high priority issues are resolved in a timely manner. • Responsible for keeping the environment up and running. • In many cases is responsible for identifying and reporting hardware problems.

	<ul style="list-style-type: none"> • Capable of writing purchase justifications. • Understands basic routing concepts. • Identify and track issues, risks, and action items. • Resolve and/or assist in resolving issues. • Review, prioritize, and research service requests. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner.
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SA3

Years of Relevant Experience	4 plus years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in SA2 plus the following:</p> <ul style="list-style-type: none"> • Solid understanding of networking/distributed computing environment concepts. • Understands principles of routing client/server programming. • Manage expectations at all levels: customers/end users, executive sponsors. • Ensure quality standards are followed. • Understand the business application of technical support and design in an application development environment. • Work with the various Infrastructure teams and operations provider to identify the strategic direction of systems management activities. • Understands the design of consistent network-wide file system layouts. • Maintain strong relationships with employees and various tier two and three support groups. • Develop plans for disaster recovery / backup and archiving. • Manage the daily operations of the systems management team to ensure service levels are being met. • Manage the systems management team’s support issue and backlog. • Monitor the team’s open backlog of support issues and re-assign issues as necessary to ensure they are closed per agreed upon service levels. • Act as the first level of escalation for high priority support issues. • Function as the liaison to the various support groups with whom the systems management team interfaces. • Develop the technical infrastructure maintenance strategy. • Manage the system management resources. • Act as a system’s management expert.

	<ul style="list-style-type: none"> Analyze, determine, and document requirements in terms of system management needs and implement them. Identify, approve, and prioritize team projects. Manages a large site or network. Recommends policies on system use and services.
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System Specialist

The System Specialist (SS) is knowledgeable on the usage and support of a collection of development platforms or technical architectures, and products that run on those platforms. The primary responsibility of a System Specialist is to ensure the availability and facilitate the productive use of a development platform or a test environment for Application Teams or end users. The System Specialist may support one or several instances of a platform/environment, applying their skills directly to a platform/environment and/or leveraging their skills across multiple platforms/environment. The System Specialist may, especially for usage and support of a platform, be part of an Application Team using the architecture. The System Specialist requires experience and skills in the environment supported and in the operations and common usage of products for the environment. The System Specialist is responsible for collaborating with Technical Architecture Specialists, Functional Architects, Programmers and vendors to coordinate and enhance the use of the platform and facilitate migration to new versions of the platform.

SS1

Years of Relevant Experience	1-3 years in desired environment
Preferred Education	4 year college degree or equivalent technical study
Role Description	<ul style="list-style-type: none"> Assist in coordination of testing changes, upgrades and new products, ensuring systems will operate correctly in current and future environment. Make recommendations on functional and technical improvements to the environment. Participate in performance and volume analysis and design. Participate in performance improvement activities. Identify and apply potential improvements related to the environment for an application. Provide accurate and complete answers to general use and environment questions in a timely manner. Provide effective on-site environment support as needed. Accurately set severity of identified defects. Provide input to training and/or documentation materials regarding latest technical and functional design changes. Ensure that all work is documented for future reference. Follow quality standards. Ensure effective and reliable backups are being performed and distributed properly. Proactively address customer needs. Track and anticipate volume and type of use of the environment.

	<ul style="list-style-type: none"> • Plan and implement shared software, such as operating systems, configuration management tools, application and development tools, testing tools, compilers, and code editors. • Basic scripting and programming skills, including languages that run on specified platform. • Analytical and customer service skills. • Communicate accurate and useful status updates. • Ability to work in a team environment. • Complete assigned tasks. • Strong communication skills; both written and spoken.
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SS2

Years of Relevant Experience	3-5 years in desired environment
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in SS1 plus the following:</p> <ul style="list-style-type: none"> • Plan and manage network operating system upgrades. • Actively participate in analyzing and evaluating emerging software and hardware technologies/standards. • Serve as a liaison between teams for network planning and connectivity. • Develop appropriate functional and usability standards for the environments. • Plan or assist in planning network environment, including supporting existing structure and enhancements. • Plan and coordinate testing changes, upgrades and new and standard products, ensuring systems will operate correctly in current and future environment. • Anticipate, identify, track and resolve issues and risks affecting own work and work of the Application or Environment team. Develop contingency plans as necessary. • Analyze the functional and/or technical impact of new product releases. • Advanced scripting and programming skills, including languages that run on specified platform. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner. • Identify and track issues, risks and action items.

SS3

Years of Relevant Experience	5 plus years in desired environment
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in SS2 plus the following:</p> <ul style="list-style-type: none"> • Identify opportunities for new and improved technologies/standards to be used in the organization. • Identify, plan, and implement phase-out strategies for products and technologies. • Plan and coordinate testing changes, upgrades, and new products, ensuring systems will operate correctly in current and future environment. • Demonstrate expertise in teaching/conveying technical courses/concepts. • Assist in setting architecture direction and knowledge sharing. • Plan, organize, prioritize, and manage multiple work efforts the Application or Environment Teams. • Develop appropriate work programs and use to effectively schedule tasks/assignments.

Technical Architecture Specialist

The Technical Architecture Specialist (TAS) is the technical expert centered on a technology, technologies, or a portfolio of applications. The Technical Architecture Specialist is the technologist who coordinates with other parties in setting the technical approach, direction, and implementation for work. The Technical Architecture Specialist provides technical design expertise, defines what technical requirements are needed to support defined business requirements, participates in detailed design and code reviews, reviews system performance issues, reviews test plans, and provides technical guidance to the Application Team and Test Team members. The Technical Architecture Specialist is responsible for collaborating with the Team Lead(s) to coordinate project schedules, budgets, management of requests, and work authorization. The expert level Technical Architecture Specialist will interface with Executive Sponsors, Group Leads, and Lead Functional Architects to convey infrastructure requirements, plan, and schedule deployment of tasks, and resolve any issues that impact the deployment of the Application Delivery systems.

TAS1

Years of Relevant Experience	2 to 5 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<ul style="list-style-type: none"> • Define test plans and criteria for acceptance for the technical components of an application. • Ensure business requirements are supported by the technical architecture.

	<ul style="list-style-type: none"> • Assist in leading technical direction of software; coordinating and presenting proposals to Group Leads, Leads, and the client. • Define and evaluate logical and physical data models. • Assist in development of overall system technical architecture - including software and hardware. • Define test plans and criteria for acceptance for the technical components of an application. • Analyze, determine, and document technical requirements and change request impact analysis. • Participate in detailed design and product test execution as required. • Develop technical programming standards. • Ensure business requirements are supported by the technical architecture. • Conduct structured walk-throughs or inspections for technical areas; resolve issues. • Assist in defining technical programming standards. • Communicate accurate and useful status updates. • Manage and report time spent on all work activities. • Follow quality standards. • Ability to work in a team environment. • Complete assigned tasks. • Strong communication skills; both written and spoken. • Perform integration of various architectures across multiple enterprises. • Develop overall system technical architecture - including software and hardware. • Perform review of technical designs, code, and component test plans. • Resolve and / or assist in resolving cross application technical issues. • Conduct structured walk-throughs or inspections for technical areas; resolve issues. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner. • Identify and track issues, risks, and action items.
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TAS2

Years of Relevant Experience	5 plus years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in TAS1 plus the following:</p> <ul style="list-style-type: none"> • Ensure consistency and completeness across data models.

	<ul style="list-style-type: none"> • Plan and deliver development architecture environments in coordination with the Environmental Support Specialist. • Assist in managing and directing team’s technical architecture processes. • Provide assistance in scheduling design work for Lead Technical Architecture Specialist. • Develop and document expert practices/standards. • Possesses strong analysis, presentation, documentation, and quality assurance skills. • Analyze, determine, and document technical requirements and impact analysis for technical and development architectures. • Explain defect priorities and enhancement classifications to client and customer when needed. • Maintain awareness of new technological developments in industry and processes – implement concepts appropriately. • Lead or participate in setting the service levels for the application. • Define overall system logical architecture. • Provide standard, well-structured work planning which defines scope, resources, milestones, quality, risk, tasks, and acceptance criteria. • Prepare contingencies, scenarios, scenario plans and action items to resolve issues. • Lead efforts in providing technical expertise, guidance, and training to the Application and Test Teams.
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TAS3

Years of Relevant Experience	5 plus years, and 1 to 2 years project management experience
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in TAS2 plus the following:</p> <ul style="list-style-type: none"> • Communicate effectively with IT staff, client organization, and software / hardware suppliers. • Lead efforts in designing technical strategy, direction and approach, technical architecture, data architecture, development architecture, performance tuning, performance and capacity analysis, technical standards, technical reliability, and flexibility. • Design and define overall system technical architecture – including software and hardware within the framework and constraints of technical architecture. • Evaluate alternative designs. • Maintain control of specific tools and assets.

	<ul style="list-style-type: none"> • Own the technical architecture for a portfolio of applications, including the interpretation and application of the technical architecture. • Plan design development and/or execution of architectures. Participate in the plan and design of technical architecture. • Assist with the preparation of estimates for new technology applications and maintenance of existing applications as part of Service Management. • Provide experience in utilizing the project architecture. • Acknowledged as highly competent in one or more technologies. • Communicate accurate and useful status reports and other management on a timely basis. • Coordinate and conduct project architecture, infrastructure review meetings, and portfolio review meetings with Group Lead, Lead Functional Architects, and Team Leads. Integrate issues and identify impacts. • Communicate and resolve application interface issues. • Communicate to team members the relations between their work assignments and the organizational and/ or program strategy, objectives, business and technology needs of the application / system. • Share knowledge across teams with both similar and non-similar applications, specifically focusing on Technical Architecture. • Interpret and communicate technical architecture to the Technology Application Architecture Team (s).
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Voice/Data Engineer

The Voice/Data Engineer (VDE) directs and participates in all activities related to the selection and installation of telephone facilities and special on-premises equipment that will meet the customer's communication requirements. The Voice/Data Engineer is responsible for all technology and connectivity involving telecommunications and data networks. The Voice/Data Engineer will typically specialize in telephony and data interfaces and systems that have proprietary functions within the communications area of a corporation/business. General wiring excluded, the Voice/Data Engineer ensures that any specialized conduit or wiring is properly deployed and installed according to code. The Voice/Data Engineer is also an expert in audio/visual, teleconferencing, and voice mail equipment. Often times, the Voice/Data Engineer is specialized or is certified in a particular piece of equipment.

VDE1

Years of Relevant Experience	0 to 2 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<ul style="list-style-type: none"> • Ensure proper connectivity of voice and data services and technologies.

	<ul style="list-style-type: none"> • Interact and work with Telecom Engineer, Integration Engineer, or Project Manager. • Prepare all job-related paperwork. • Close out work authorization when equipment is in service.
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VDE2

Years of Relevant Experience	2 to 5 years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in VDE1 plus the following:</p> <ul style="list-style-type: none"> • Prepare equipment floor plan for customer or architect approval. • Determine telephone, data services/components, and audio/visual equipment placement within facility. • Act as installer of equipment for data/voice or audio/visual use. • Install, test, configure, and train users on products and equipment. • Support systems and products associated with telecommunications/telephone and data within a facility or department.

VDE3

Years of Relevant Experience	5 plus years
Preferred Education	4 year college degree or equivalent technical study
Role Description	<p>All roles specified in VDE2 plus the following:</p> <ul style="list-style-type: none"> • Familiar with at least one type of equipment or service that is highly specialized. • Prepare cost estimate for equipment and installation and submit data to management for authorization to proceed with job. • Order equipment and prepare installation specification. • Monitor installation progress to ensure that the facilities are ready on projected date. • Lead a team of installers and junior Voice/Data Engineers